VERMEULEN et al. -- 10/825,224 Attorney Docket: 081468-0309212

#### IN THE SPECIFICATION:

The specification as amended as follows:

## Please amend paragraph [0002] as follows:

[0002] A lithographic apparatus is a machine that applies a desired pattern onto a target portion of a substrate. A lithographic apparatus can be used, for example, in the manufacture of integrated circuits (IC's). In that circumstance, a patterning device, such as a mask, may be used to generate a circuit pattern corresponding to an individual layer of the IC, and this pattern can be imaged onto a target portion (e.g., including part of one, or several, dies) on a substrate (e.g., a silicon wafer) that has a layer of radiation-sensitive material (resist). In general, a single substrate will contain a network of adjacent target portions that are successively exposed. Known lithographic apparatus include so-called steppers, in which each target portion is irradiated by exposing an entire pattern onto the target portion at once, and so-called scanners, in which each target portion is irradiated by scanning the pattern through the projection beam in a given direction (the "scanning"-direction) while synchronously scanning the substrate parallel or anti-parallel to this direction.

## Please amend paragraph [0031] as follows:

[0031] The illumination system may also encompass various types of optical components, including refractive, reflective, and catadioptric optical components for directing, shaping, or controlling the projection beam of radiation, and such components may also be referred to below, collectively or singularly, as a "lens".

#### Please amend paragraph [0045] as follows:

[0045] The depicted apparatus can be used in the following preferred modes:

- 1. In step mode, the mask table MT and the substrate table WT are kept essentially stationary, while an entire pattern imparted to the projection beam is projected onto a target portion C at once (i.e. a single static exposure). The substrate table WT is then shifted in the X and/or Y direction so that a different target portion C can be exposed. In step mode, the maximum size of the exposure field limits the size of the target portion C imaged in a single static exposure.
- 2. In scan mode, the mask table MT and the substrate table WT are scanned synchronously while a pattern imparted to the projection beam is projected onto a target portion C (i.e. a single dynamic exposure). The velocity and direction of the substrate table WT relative to the mask table MT is determined by the (de-)magnification and image reversal

characteristics of the projection system PL. In scan mode, the maximum size of the exposure field limits the width (in the non-scanning direction) of the target portion in a single dynamic exposure, whereas the length of the scanning motion determines the height (in the scanning direction) of the target portion.

3. In another mode, the mask table MT is kept essentially stationary holding a programmable patterning device, and the substrate table WT is moved or scanned while a pattern imparted to the beam is projected onto a target portion C. In this mode, generally a pulsed radiation source is employed and the programmable patterning device is updated as required after each movement of the substrate table WT or in between successive radiation pulses during a scan. This mode of operation can be readily applied to maskless lithography that utilizes programmable patterning device, such as a programmable mirror array of a type as referred to above.

# Please amend paragraph [0053] as follows:

[0053] Turning to FIG. 5, the coil assembly 12 is shown having a first side S1, a second side S2 and a height h1. Here, the sides S1 and S2 are shown as the top side and the bottom side of the coil assembly 12. However, it should be appreciated that the coil assembly can be oriented in any direction. The crossover sections of each coil 6, 7 and 8 have a crossover section height h2. The crossing heights h2 are chosen such that the combined crossover section heights h2 are smaller than the coil height h1 and are equal to at most a height h3 of the second coil 7 outside the crossing area 20. This allows the respective crossover sections to be configured between the two planes defined by the respective sides S1 and S2. Therefore, the crossover sections do not extend beyond the planes defined by S1 and a reduced height of the coil assembly 12. In a typical coil configuration, the coils are enclosed in another material (not shown), often a synthetic material such as an epoxy resin. The reduced height of the coil assembly 12 allows the use of less epoxy in order to enclose the coils therein. Less material implies that the coil assembly will have less mass. When the coil assembly, and thus the moving part 5 of the positioning device 1, has less mass, greater accelerations can be achieved with the same force, or the same accelerations can be achieved with a lower force, thus leading to improved dynamic characteristics of the positioning device 1.